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Monika Dudek  
McDonnell Boehnen Hulbert & Berghoff  
32nd Floor  
300 S. Wacker Drive  
Chicago, IL 60606

EXAMINER

KADING, JOSHUA A

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2661

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/837,106	<b>Applicant(s)</b> JOSEPH ET AL.	
	<b>Examiner</b> Joshua Kading	<b>Art Unit</b> 2661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7-20-2001</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Objections*

Claims 17, 18, and 20 are objected to because of the following informalities:

Line 4 of claim 17 states "a plurality of physical network address". Address

5 should be plural, therefore it is recommended that applicant change line 4 to read --a plurality of physical network addresses--.

Claim 18, line 1 states "the unique identifier". There is no antecedent basis for a "unique" identifier. As such it is suggested applicant change "the unique identifier" to --the identifier--.

10 Claim 20, lines 1-2 state "aggregates each label". There is no antecedent basis for "label". It is believed applicant means "identifier" instead of "label". Thus it is suggested "aggregates each label" be changed to --aggregates each identifier--.

Appropriate correction is required.

### 15 *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

20 Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 states "the destination identifier is created during the step of establishing the routing path..." This does not make sense and seems to conflict with independent

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claim 1; i.e. claim 1 states that the destination identifier is already in existence when the message is received from the host device and then is used to create a mapping of a physical network address, not to create a destination identifier. If applicant does mean to create a destination identifier in claim 7, it is unclear how this could happen since the destination identifier already exists in claim 1, unless it is a new destination identifier (in which case it must be claimed as such) or if it was meant to be the physical network address created during the mapping process.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daruwalla et al. (U.S. Patent 6,693,878 B1).

Regarding claim 1, Daruwalla discloses "a method for routing information between a first host on a first network and a plurality of hosts on a second network, the method comprising:

establishing a routing path between the first host on the first network and one of the plurality of hosts on the second network (figure 3, elements 302, 304, 306, 308, and

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310 all act as nodes in network 330, elements 352 and 362 act as access points for the nodes in their respective enterprises, and elements 311 and 313 are the established paths between the nodes in network 330 and the enterprises);

establishing a routing table comprising a plurality of physical network addresses

5 for the plurality of hosts on the second network, each of the plurality of physical network addresses associated with a unique identifier (col. 12, lines 40-62 the MAC addresses are the physical network addresses and each is associated with an identifier VPN; although it is not stated that the identifier is unique, col. 11, lines 39-44 does suggest that each MAC address has a unique identifier and cannot have more than one  
10 identifier)...”

However, Daruwalla explicitly lacks “receiving a message from the first host, the message comprising a destination identifier; determining a physical network address in the routing table using the destination identifier; mapping the physical network address determined to the message; and routing the message to one of the plurality of hosts  
15 using the physical network address.”

Although Daruwalla does not disclose, explicitly, the deficiencies set forth above, Daruwalla does disclose the “reverse” of the steps above:

“Receiving a message from the first host, the message comprising a destination identifier (col. 13, lines 31-54 where if the network can create a message with an  
20 identifier, then it must be able to receive a message with an identifier for routing to its destination); determining a physical network address in the routing table using the destination identifier (col. 13, lines 31-54 where if the physical network address was

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used to associate the message with an identifier, then the identifier can be used to associate the message with a physical network address); mapping the physical network address determined to the message (col. 13, lines 31-54 where to be routed to its final destination within the network, the physical network address must be known and that information is stored in the table associating the identifier with the physical network address); and routing the message to one of the plurality of hosts using the physical network address (col. 13, lines 31-54 where the message is finally sent to its final destination).”

The steps disclosed in Daruwalla are the “reverse” of what is claimed by applicant. However, there is no reason to assume that the communication system in Daruwalla operates in a unidirectional manner. If it sends data, such as requests for information, in a processed form, it must be able to receive data in the same processed form and convert it back to useful information.

It would have been obvious to one with ordinary skill in the art at the time of invention to have the data link layer identifier and address associated and used for routing of data for the purpose of routing messages between nodes using virtual private networks (Daruwalla, col. 4, lines 40-48). The motivation for using virtual private networks is that they can allow messages to be transmitted within the virtual network thus saving processing time and resources.

Regarding claim 3, Daruwalla discloses the method of claim 1. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 1,

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Daruwalla further discloses "the routing path comprises a multiprotocol label switched path (col. 13, lines 21-26)." It would have been obvious to one with ordinary skill in the art to have the routing path comprise a multiprotocol label switching path for the same reasons and motivation as in claim 1.

5

Regarding claim 5, Daruwalla discloses the method of claim 3. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 3, Daruwalla further discloses "the destination identifier comprises a multiprotocol label (col. 13, lines 45-47)." It would have been obvious to one with ordinary skill in the art to have the identifier comprise a multiprotocol label for the same reasons and motivation as in claim 3.

10

Regarding claim 6, Daruwalla discloses the method of claim 1. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 1, Daruwalla further discloses "the physical network address comprises a medium access control address (col. 11, lines 37-43 where the MAC addresses are data link layer addresses)." It would have been obvious to one with ordinary skill in the art to have the address comprise a MAC address for the same reasons and motivation as in claim 1.

15

20 Since it is unclear what applicant means by "the destination identifier is created", it is assumed applicant intended to create a physical network address in claim 7, not a destination identifier.



Regarding claim 7, Daruwalla discloses the method of claim 1. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 1, Daruwalla further discloses "the [physical network address] is created during the step of establishing the routing path from the first host on the first network to the one of the plurality of hosts on the second network (col. 13, lines 31-54 where to be routed to its final destination within the network, the physical network address must be known and that information is stored in the table associating the identifier with the physical network address, thus the identifier is used to "create" the physical network address for further routing of the message)." It would have been obvious to one with ordinary skill in the art to have the physical network address created for the same reasons and motivation as in claim 1.

Regarding claim 2, Daruwalla discloses the method of claim 1. The embodiment of claim 1 is not realized on a computer readable medium as an executable program as described in the above referenced columns. However, Daruwalla does disclose that all of the embodiments are capable of being executed on a computer readable medium (col. 18, lines 59-col. 19, lines 1-20). It would have been obvious to one with ordinary skill in the art at the time of invention to have the method of claim 1 stored on a computer readable medium as an executable program for the purpose of performing the processes involved in manipulating electronic (or optical) sources of data. The motivation for using a computer program to manipulate electronic

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data is that the computer is the only practical and efficient way of processing electric signals.

Regarding claim 8, Daruwalla discloses "a system for routing messages,

5 comprising in combination:

a local routing table comprising a plurality of physical network addresses and a unique identifier associated with each of the plurality of physical network addresses (col. 12, lines 40-62 the MAC addresses are the physical network addresses and each is associated with an identifier VPN; although it is not stated that the identifier is unique, 10 col. 11, lines 39-44 does suggest that each MAC address has a unique identifier and cannot have more than one identifier);

a host on a first network (figure 3, elements 302, 304, 306, 308, and 310 all act as hosts);

a plurality of local hosts on a second network, the plurality of local hosts having 15 the plurality of physical network addresses and sharing a globally-routable network address (figure 3, elements 352 and 362 act as access points for the nodes in their respective enterprises and it is reasonable to assume that these enterprises have more than one node associated with them; further as with nodes 302, 304, 306, 308, and 310, the nodes of the second network must have physical network addresses as read in col. 20 12, lines 40-62 the MAC addresses are the physical network addresses, further figure 6 shows that several of the MAC addresses, such as those identified by their VPN's in

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figure 7, share an IP address, in other words they all have a globally-routable network layer address)...”

However, Daruwalla explicitly lacks “a local processing module for determining a physical network address upon a receipt of a message comprising a destination  
5 identifier from the host on the first network, wherein the local processing module determines the physical network address based on the destination identifier using the local routing table, and transmitting the message to one of the plurality of hosts on the second network using the physical network address.”

Although Daruwalla does not disclose, explicitly, the deficiencies set forth above,  
10 Daruwalla does disclose the “reverse” of the function of the module above:

“A local processing module (figure 3, element 322) for determining a physical network address upon a receipt of a message comprising a destination identifier from the host on the first network (col. 13, lines 31-54 where if the network can create a message with an identifier, then it must be able to receive a message with an identifier  
15 for routing to its destination), wherein the local processing module determines the physical network address based on the destination identifier using the local routing table (col. 13, lines 31-54 where if the physical network address was used to associate the message with an identifier, then the identifier can be used to associate the message with a physical network address), and transmitting the message to one of the plurality of  
20 hosts on the second network using the physical network address (col. 13, lines 31-54 where the message is finally sent to its final destination).”

The function of the module disclosed in Daruwalla is the “reverse” of what is claimed by applicant. However, there is no reason to assume that the communication system in Daruwalla operates in a unidirectional manner. If it sends data, such as requests for information, in a processed form, it must be able to receive data in the same processed form and convert it back to useful information.

It would have been obvious to one with ordinary skill in the art at the time of invention to have the data link layer identifier and address associated and used for routing of data for the purpose of routing messages between nodes using virtual private networks (Daruwalla, col. 4, lines 40-48). The motivation for using virtual private networks is that they can allow messages to be transmitted within the virtual network thus saving processing time and resources.

Regarding claim 9, Daruwalla discloses the system of claim 8. Although Daruwalla does not explicitly disclose the deficient function of the module of claim 8, Daruwalla further discloses “the plurality of physical network addresses comprises a plurality of medium access control network addressees (col. 11, lines 37-43 where the MAC addresses are data link layer addresses), and the globally-routable network layer address comprises an Internet Protocol address (figure 6 shows that several MAC addresses, such as those identified by their VPN’s in figure 7, share an IP address, in other words they all have a globally-routable network layer address).” It would have been obvious to one with ordinary skill in the art to have the physical network addresses

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be MAC addresses and the global-routable address consist of an IP address for the same reasons and motivation as in claim 8.

Regarding claim 10, Daruwalla discloses "the system of claim 8, wherein the  
5 identifiers comprise multi-protocol label switching labels (col. 13, lines 45-47)." It would have been obvious to one with ordinary skill in the art to have the identifier comprise a multiprotocol label for the same reasons and motivation as in claim 8.

Regarding claim 11, Daruwalla discloses "a method for transmitting data, the  
10 method comprising:

establishing a routing path from a first host on a first network to a second host on a second network (figure 3, elements 302, 304, 306, 308, and 310 all act as nodes in network 330, elements 352 and 362 act as access points for the nodes in their respective enterprises, and elements 311 and 313 are the established paths between  
15 the nodes in network 330 and the enterprises), the second host comprising a unique data link layer address (col. 11, lines 37-43) and sharing a globally-routable network layer address with a plurality of hosts on the second network (figure 6 shows that several MAC addresses, such as those identified by their VPN's in figure 7, share an IP address, in other words they all have a globally-routable network layer address);

20 allocating a data link layer identifier for the data link layer address associated with the second host (col. 12, lines 40-62 where figure 7 makes reference to the SID, but as read in lines 60-62 the MAC address may be used instead the SID to make

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associations in the table, further the VPN entry in the table functions as the data link layer identifier);

storing the data link layer identifier with the data link layer address associated with the second host in a routing table (col. 12, lines 40-62), the routing table comprising  
5 a plurality of data link layer addresses associated with the plurality of hosts on the second network, wherein each of the plurality of data link layer addresses is associated with a unique data link layer identifier (col. 12, lines 40-62 where it is not stated here that the identifier is unique, col. 11, lines 39-44 does suggest that each MAC address has a unique identifier and cannot have more than one identifier)..."

10 However, Daruwalla explicitly lacks "receiving a message from the first host on the first network, the message comprising the data link layer identifier; determining the data link layer address based on the received data link layer identifier using the routing table; mapping the data link layer address to the message; and routing the message to the second host using the data link layer address determined based on the data link  
15 layer identifier received in the message."

Although Daruwalla does not disclose, explicitly, the deficiencies set forth above, Daruwalla does disclose the "reverse" of the steps above:

"Receiving a message from the first host on the first network, the message comprising the data link layer identifier (col. 13, lines 31-54 where if the network can  
20 create a message with a data link layer identifier, then it must be able to receive a message with a data link layer identifier for routing to its destination); determining the data link layer address based on the received data link layer identifier using the routing

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table (col. 13, lines 31-54 where if the data link address was used to associate the message with a data link layer identifier, then the data link layer identifier can be used to associate the message with a data link address); mapping the data link layer address to the message (col. 13, lines 31-54 where to be routed to its final destination within the network, the data link layer address must be known and that information is stored in the table associating the data link layer identifier with the data link address); and routing the message to the second host using the data link layer address determined based on the data link layer identifier received in the message (col. 13, lines 31-54 where the message is finally sent to its final destination).”

The steps disclosed in Daruwalla are the “reverse” of what is claimed by applicant. However, there is no reason to assume that the communication system in Daruwalla operates in a unidirectional manner. If it sends data, such as requests for information, in a processed form, it must be able to receive data in the same processed form and convert it back to useful information.

It would have been obvious to one with ordinary skill in the art at the time of invention to have the data link layer identifier and address associated and used for routing of data for the purpose of routing messages between nodes using virtual private networks (Daruwalla, col. 4, lines 40-48). The motivation for using virtual private networks is that they can allow messages to be transmitted within the virtual network thus saving processing time and resources.

Regarding claim 13, Daruwalla discloses the method of claim 11. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 11, Daruwalla further discloses "the routing path comprises a label switching path (col. 13, lines 21-26)." It would have been obvious to one with ordinary skill in the art to have the routing path comprise a label switching path for the same reasons and motivation as in claim 11.

Regarding claim 14, Daruwalla discloses the method of claim 11. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 11, Daruwalla further discloses "the data link layer identifiers comprise multi-protocol label switching labels (col. 13, lines 45-47)." It would have been obvious to one with ordinary skill in the art to have the identifier comprise a multiprotocol label for the same reasons and motivation as in claim 11.

Regarding claim 15, Daruwalla discloses the method of claim 11. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 11, Daruwalla further discloses "the data link layer addresses comprises medium access control addresses (col. 11, lines 37-43 where the MAC addresses are data link layer addresses), and the globally-routable network layer address comprises an Internet Protocol address (figure 6 shows that several MAC addresses, such as those identified by their VPN's in figure 7, share an IP address, in other words they all have a globally-routable network layer address)." It would have been obvious to one with ordinary skill



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in the art to have the data link layer addresses be MAC addresses and the global-routable address consist of an IP address for the same reasons and motivation as in claim 11.

5           Regarding claim 16, Daruwalla discloses the method of claim 11. Although Daruwalla does not explicitly disclose the deficient steps of the method of claim 11, Daruwalla further discloses "the message comprises Voice over Internet Protocol packet (col. 1, lines 24-29 where Daruwalla suggests that the message transmitted over the cable modem network of claim 11 can consist of voice is transmitted using IP  
10   addresses)." It would have been obvious to one with ordinary skill in the art to have the message consist of a VoIP message for the same reasons and motivation as in claim 11.

          Regarding claim 12, Daruwalla discloses the method of claim 11. The  
15   embodiment of claim 11 is not realized on a computer readable medium as an executable program as described in the above referenced columns. However, Daruwalla does disclose that all of the embodiments are capable of being executed on a computer readable medium (col. 18, lines 59-col. 19, lines 1-20). It would have been obvious to one with ordinary skill in the art at the time of invention to have the method of  
20   claim 11 stored on a computer readable medium as an executable program for the purpose of performing the processes involved in manipulating electronic (or optical) sources of data. The motivation for using a computer program to manipulate electronic

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data is that the computer is the only practical and efficient way of processing electric signals.

Regarding claim 17, Daruwalla discloses "a system for routing messages,

5 comprising in combination;

a centralized routing module (figure 3, element 322 acts as the central module for routing and table maintenance) for generating a routing table for a switch module associated with a plurality of network entities sharing a globally-routable network address (figure 6 shows that several MAC addresses, such as those identified by their  
10 VPN's in figure 7, share an IP address, in other words they all have a globally-routable network layer address), the routing table comprising a plurality of physical network address[es] associated with the plurality of network entities (col. 12, lines 40-62 where the MAC addresses (which are represented by the SID column in the table as per lines 60-62) are the physical network addresses each corresponding to a separate network  
15 entity), wherein each physical network address is associated with an identifier (col. 12, lines 40-62 where he VPN acts as the identifier associated with the MAC address)..."

However, Daruwalla explicitly lacks "the switch module for receiving a data packet comprising a destination identifier, the switch module determining a destination physical network address by mapping the destination identifier to one of the plurality of  
20 physical network addresses in the routing table and routing the data packet to a network entity associated with the determined physical network address."

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Although Daruwalla does not disclose, explicitly, the deficiencies set forth above, Daruwalla does disclose the "reverse" of the switch function above:

"The switch module for receiving a data packet comprising a destination identifier (col. 13, lines 31-54 where if the network can create a message with a data link layer identifier, then it must be able to receive a message with a data link layer identifier for 5 routing to its destination), the switch module determining a destination physical network address by mapping the destination identifier to one of the plurality of physical network addresses in the routing table (col. 13, lines 31-54 where if the data link address was used to associate the message with a data link layer identifier, then the data link layer 10 identifier can be used to associate the message with a data link address) and routing the data packet to a network entity associated with the determined physical network address (col. 13, lines 31-54 where the message is finally sent to its final destination)."

The function disclosed in Daruwalla is the "reverse" of what is claimed by applicant. However, there is no reason to assume that the communication system in 15 Daruwalla operates in a unidirectional manner. If it sends data, such as requests for information, in a processed form, it must be able to receive data in the same processed form and convert it back to useful information.

It would have been obvious to one with ordinary skill in the art at the time of invention to have the data link layer identifier and address associated and used for 20 routing of data for the purpose of routing messages between nodes using virtual private networks (Daruwalla, col. 4, lines 40-48). The motivation for using virtual private

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networks is that they can allow messages to be transmitted within the virtual network thus saving processing time and resources.

Regarding claim 18, Daruwalla discloses the system of claim 17. Although

5 Daruwalla does not explicitly disclose the deficient function of the switch module of claim 17, Daruwalla further discloses "the identifier and the destination identifier comprise a data link layer identifier (col. 12, lines 40-62 where the MAC addresses (which are represented by the SID column in the table as per lines 60-62) are the data link layer addresses which are identified by the VPN, therefore the VPN is a data link  
10 layer identifier)." It would have been obvious to one with ordinary skill in the art to have the identifiers consist of data link layer identifiers for the same reasons and motivation as in claim 17.

Regarding claim 19, Daruwalla discloses the system of claim 18. Although

15 Daruwalla does not explicitly disclose the deficient function of the switch module of claim 18, Daruwalla further discloses "the data link layer identifier comprises a multi-protocol label switching label (col. 13, lines 45-47)." It would have been obvious to one with ordinary skill in the art to have the identifier comprise a multiprotocol label for the same reasons and motivation as in claim 18.

Regarding claim 20, Daruwalla discloses the system of claim 17. Although Daruwalla does not explicitly disclose the deficient function of the switch module of claim 17, Daruwalla further discloses "the centralized routing module aggregates each [identifier] to at least one data flow associated with each of the plurality of network  
5 entities (figure 7 shows the identifiers in column 712 which are to be associated with data flows as seen in figure 3A for example)." It would have been obvious to one with ordinary skill in the art to have the identifiers associated with data flows for the same reasons and motivation as in claim 17.

10 Regarding claim 22, Daruwalla discloses the system of claim 17. Although Daruwalla does not explicitly disclose the deficient function of the switch module of claim 17, Daruwalla further discloses "upon the allocation of the identifier for each network host, a routing path is created for each host (since figure 7 shows the associations between the MAC addresses, or each host, and the identifiers, and figure  
15 3A suggests that each identifier has its own path, it is reasonable to assume that the routing path for each host is thusly created when assigned with a particular identifier)." It would have been obvious to one with ordinary skill in the art to have a routing path for each host for the same reasons and motivation as in claim 17.

20 Claims 4 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daruwalla et al. in view of Raj et al.

Regarding claim 4, Daruwalla discloses the method of claim 3. However, Daruwalla lacks what Raj discloses, "the label switched path is established using a Resource Reservation Protocol (col. 4, lines 44-52)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the Resource Reservation

5 Protocol with the method of claim 3 for the purpose of allowing the switch to be controlled so that the data can be routed (Raj, col. 4, lines 48-52). The motivation for wanting to control a switch for routing is that the resources for the switch can be allocated to for the data wanting to be transmitted, this ensures delivery of the data.

10 Regarding claim 21, Daruwalla discloses the system of claim 17. However, Daruwalla lacks what Raj discloses, "the centralized routing module allocates an identifier for each network host upon a receipt of a Resource Reservation Protocol message for each network host (col. 4, lines 44-52)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the Resource Reservation

15 Protocol with the system of claim 17 for the purpose of allowing the switch to be controlled so that the data can be routed (Raj, col. 4, lines 48-52). The motivation for wanting to control a switch for routing is that the resources for the switch can be allocated to for the data wanting to be transmitted, this ensures delivery of the data.

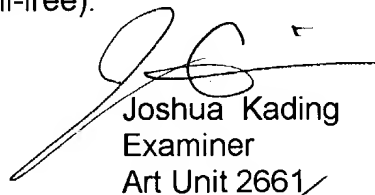
20 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

- 5 Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic
- 10 Business Center (EBC) at 866-217-9197 (toll-free).

  
Joshua Kading  
Examiner  
Art Unit 2661

August 6, 2004

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KENNETH VANDERPUYE  
PRIMARY EXAMINER